Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): A hybrid bioreactor for cell culture, comprising:

a plurality of reactor tube assemblies;

a compressive strain motor;

a ball screw coupled to be operated in conjunction with the compressive strain motor;

an upper anchor mount vertically reciprocated while being combined with the ball screw and provided with a plurality of compressive strain anchors holding lower ends of the reactor tube assemblies;

a lower anchor mount adapted to hold lower ends of the reactor tube assemblies and provided with a plurality of toothed anchors on outer surface of which teeth are formed;

a shear strain motor; and

power transmitting means for transmitting a rotating force of the shear strain motor to the plurality of toothed anchors.

Claim 2 (original): The hybrid bioreactor as set forth in claim 1, wherein the power transmitting means comprises:

a main driving gear fitted around an output shaft of the shear strain motor;

a hollow main rotating shaft placed in a center portion

of the lower anchor mount to be rotated;

a lower shear strain gear located below the lower anchor mount and fitted around the main rotating shaft to be engaged with the main driving gear; and

an upper shear strain gear located above the lower anchor mount and fitted around the main rotating shaft to be engaged with the main drive shaft.

Claim 3 (original): The hybrid bioreactor as set forth in claim 1, wherein the power transmitting means comprises:

a main drive pulley fitted around an output shaft of the shear strain motor;

a hollow main rotating shaft placed in a center portion of the lower anchor mount to be rotated;

a lower shear strain pulley fitted around the main drive shaft to be located below the lower anchor mount and coupled to the main drive pulley with a belt; and

an upper shear strain gear located above the lower anchor mount and fitted around the main rotating shaft to be engaged with all the toothed anchors.

Claim 4 (original): A hybrid bioreactor for cell culture, comprising:

a compressive strain motor having a lengthy output shaft;

a main support adapted to contain the compressive strain motor and provided with a hollow support column extending upward;

an upper compressing means comprising a ball screw for vertical transfer mounted on an upper end of the output shaft of the compressive strain motor, an upper anchor combined with the ball screw and provided with a hollow guide column extending downwardly at a center thereof, and a plurality of

compressive strain anchors placed on an outer portion of the upper anchor mount to be rotated on their own axes;

lower anchoring means comprising a lower anchor mount provided with a through hole at a center thereof and concentrically mounted on the upper support, and a plurality of toothed anchors mounted on an outer portion of the lower anchor mount to be rotated on their own axes;

a shear strain motor around an output shaft of which a main driving gear is fitted;

rotating means comprising a main rotating shaft fitted into the through hole of the lower anchor mount, a lower shear strain gear located below the lower anchor mount and fitted around the main rotating shaft to be engaged with the main driving gear, and an upper shear strain gear located above the lower anchor mount and fitted around the main rotating shaft to be engaged with all the toothed anchors; and

a plurality of reactor tube assemblies installed with upper and lower ends thereof held by the compressive strain anchors and the toothed anchors.

Claim 5 (currently amended): The hybrid bioreactor as set forth in claim 1 ~~or 4~~, wherein each of the toothed anchors has a lower small diameter portion mounted on the lower anchor mount through bearings, and an upper large diameter portion toothed on an outer surface thereof and provided with a downwardly extending fitting groove on an upper surface thereof.

Claim 6 (currently amended): The hybrid bioreactor as set forth in claim 1 ~~or 4~~, wherein each of the compressive strain anchors comprises a fitting rod provided with a lower flange part having an upwardly extending fitting groove, a center flange part supporting a spring and an upper flange part preventing

from being removed, an upper support block fastened to the upper anchor mount through a bearing and provided with a guide hole to allow the fitting rod to reciprocate through the upper anchor mount, a support housing provided with a through hole at the upper end thereof to allow the fitting rod to pass through the through hole and attached to the upper surface of the upper support block at the lower end brim thereof, and a support spring placed between the center flange part and an upper part of the support housing.

Claim 7 (currently amended): The hybrid bioreactor as set forth in claim 1 ~~or 4~~, each of the reactor tube assemblies comprises a reactor tube defining a space for culturing cells, a sealing lid sealing an upper opening of the reactor tube and having a compression guide hole at the center thereof, and a compressing rod passing through the compression guide hole and having a compressing head with an outer diameter corresponding to an inner diameter of the reactor tube.

Claim 8 (original): The hybrid bioreactor as set forth in claim 7, wherein each of the reactor tube assemblies further comprises one or more O-rings located between the sealing lid and the compressing rod.

Claim 9 (original): The hybrid bioreactor as set forth in claim 8, wherein each of the reactor tube assemblies is further provided with a bending prevention member mounted to surround a lower portion of an outside surface of the reactor tube.

Claim 10 (currently amended): The hybrid bioreactor as set forth in claim ~~8 or~~ 9, wherein the reactor tube is provided with a column-shaped porous cell support therein.

Claim 11 (new): The hybrid bioreactor as set forth in claim 4, wherein each of the toothed anchors has a lower small diameter portion mounted on the lower anchor mount through bearings, and an upper large diameter portion toothed on an outer surface thereof and provided with a downwardly extending fitting groove on an upper surface thereof.

Claim 12 (new): The hybrid bioreactor as set forth in claim 4, wherein each of the compressive strain anchors comprises a fitting rod provided with a lower flange part having an upwardly extending fitting groove, a center flange part supporting a spring and an upper flange part preventing from being removed, an upper support block fastened to the upper anchor mount through a bearing and provided with a guide hole to allow the fitting rod to reciprocate through the upper anchor mount, a support housing provided with a through hole at the upper end thereof to allow the fitting rod to pass through the through hole and attached to the upper surface of the upper support block at the lower end brim thereof, and a support spring placed between the center flange part and an upper part of the support housing.

Claim 13 (new): The hybrid bioreactor as set forth in claim 4, each of the reactor tube assemblies comprises a reactor tube defining a space for culturing cells, a sealing lid sealing an upper opening of the reactor tube and having a compression guide hole at the center thereof, and a compressing rod passing through the compression guide hole and having a compressing head with an outer diameter corresponding to an inner diameter of the reactor tube.

Claim 14 (new): The hybrid bioreactor as set forth in claim 13, wherein each of the reactor tube assemblies further comprises one or more O-rings located between the sealing lid and the compressing rod.

Claim 15 (new): The hybrid bioreactor as set forth in claim 14, wherein each of the reactor tube assemblies is further provided with a bending prevention member mounted to surround a lower portion of an outside surface of the reactor tube.

Claim 16 (new): The hybrid bioreactor as set forth in claim 15, wherein the reactor tube is provided with a column-shaped porous cell support therein.